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Remarks

In view of the following discussion, the applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U. S. C. § 103. Thus, the applicants believe that all of these claims are in allowable form.

REJECTIONS

A. 35 U. S. C. § 103

1. Claims 1, 3-8 and 10 are not obvious over Hashiba et al. in view of Ito et al.

Claims 1, 3-8 and 10 stand rejected under 35 U. S. C. § 103(a) as obvious over Hashiba et al. (U. S. Patent 4,780,641 issued October 25, 1988) in view of Ito et al. (U. S. Patent 5,672,935 issued September 30, 1997). The applicants submit that claims 1, 3-8 and 10 are not rendered obvious by the combination of these references.

Claim 1 is directed to an apparatus for retaining a damper wire on a grill type mask assembly in a cathode ray tube (*see*, specification at page 1, lines 28-31). The grill type mask assembly 30 includes a frame 36, 38 40, 42 with parallel strands 44 (*see*, FIG. 2 and the specification at page 3, lines 17-24). A bimetal damper spring 56 comprising a first metallic layer 58 disposed on a second metallic layer 60 is attached to a surface 48 of the frame 40 (*see*, FIG. 5 and the specification at page 5, lines 4-23). The bimetal damper spring 56 has a first end 62 and an opposing second end 64 that is coupled to the surface 48 of the frame 40 (*see*, FIG. 5 and the specification at page 5, lines 19-24). The first metallic layer 58 is formed of a different material than the second metallic layer 60 (*see*, specification at page 5, lines 7-14). A tab 52 affixed to the bimetal damper spring

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56 is adapted to accept the damper wire 54 that traverses the mask assembly 30 (see, FIG. 6 and the specification at page 5, lines 22-26). The damper wire 54 is coupled between the tab 52 and the bimetal damper spring 56 (see, FIG. 6 and the specification at page 5, lines 27-31).

Hashiba et al. describes an aperture grill of a cathode ray tube (see, Hashiba et al. at column 1, lines 7-9). The aperture grill 1 includes grid elements 3 stretched between arms 2 of a frame 13 (see, Hashiba et al. at FIG. 1 and column 2, lines 23-26). A damper wire 4 is stretched on the grid elements 3 by means of spring elements 21 fixed to support members 5 of the frame 13 (see, Hashiba et al. at FIG. 1 and column 2, lines 26-28). The spring elements 21 are formed of a single metal (see, Hashiba et al. at column 3, lines 8-17). Each spring element 21 includes a recess 22 formed on its free end at a position spaced from the prescribed damper wire 4 position (see, Hashiba et al. at FIGS. 3-4 and column 3, lines 8-11). The damper wire 4 is moved to the recess 22 position when the florescent surface of the cathode ray tube is formed and returned to its prescribed position thereafter (see, Hashiba et al. at column 2, lines 35-48). The damper wire 4 is affixed on each spring element 21 through a stainless steel band 7 (see, Hashiba et al. at FIG. 3 and column 3, lines 20-21).

Hashiba et al. does not describe or suggest an apparatus for retaining a damper wire on a grill type mask assembly in a cathode ray tube including a frame with parallel strands and having a bimetal damper spring comprising a first metallic layer disposed on a second metallic layer, that is formed of a different material, and attached to a surface of the frame, where a tab affixed to the bimetal damper spring is adapted to accept a damper wire, coupled between the tab and the bimetal damper spring, that traverses the mask assembly. Rather, Hashiba et al. only teaches stretching a damper wire on grid elements by means of single metal spring elements. Since Hashiba et al. does not teach an apparatus for retaining a damper wire on a grill type mask assembly in a cathode ray tube including a frame with parallel strands and having a bimetal damper spring comprising a first metallic layer disposed on a second metallic layer, that

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is formed of a different material, and attached to a surface of the frame, where a tab affixed to the bimetal damper spring is adapted to accept a damper wire, coupled between the tab and the bimetal damper spring, that traverses the mask assembly, claim 1 is patentable over Hashiba et al.

Ito et al. describes an aperture grill-type color selection electrode of a cathode ray tube (see, Ito et al. at column 1, lines 5-9). In Ito et al., an alloy spring 31 affixed to the mask frame 2 provides a temperature correction for the frame 2 (see, Ito et al. at FIG. 6 and column 1, lines 31-16).

Ito et al. does not describe or suggest an apparatus for retaining a damper wire on a grill type mask assembly in a cathode ray tube including a frame with parallel strands and having a bimetal damper spring comprising a first metallic layer disposed on a second metallic layer, that is formed of a different material, and attached to a surface of the frame, where a tab affixed to the bimetal damper spring is adapted to accept a damper wire, coupled between the tab and the bimetal damper spring, that traverses the mask assembly. Rather, Ito et al. teaches a completely different arrangement in which an alloy spring affixed to the mask frame only provides a temperature correction for the frame. Since Ito et al. does not teach an apparatus for retaining a damper wire on a grill type mask assembly in a cathode ray tube including a frame with parallel strands and having a bimetal damper spring comprising a first metallic layer disposed on a second metallic layer, that is formed of a different material, and attached to a surface of the frame, where a tab affixed to the bimetal damper spring is adapted to accept a damper wire, coupled between the tab and the bimetal damper spring, that traverses the mask assembly, claim 1 is patentable over Ito et al.

Furthermore, since Hashiba et al. only teaches stretching a damper wire on grid elements by means of single metal spring elements and Ito et al. teaches a completely different arrangement in which an alloy spring affixed to the mask frame only provides a temperature correction for the frame, the combination of these references does not describe or suggest applicant's arrangement recited in claim 1. In particular, claim 1 recites an apparatus for retaining a damper wire on

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a grill type mask assembly in a cathode ray tube including a frame with parallel strands and having a bimetal damper spring comprising a first metallic layer disposed on a second metallic layer, that is formed of a different material, and attached to a surface of the frame, where a tab affixed to the bimetal damper spring is adapted to accept a damper wire, coupled between the tab and the bimetal damper spring, that traverses the mask assembly. Thus, claim 1 is patentable over the combination of these references.

Independent claim 10 recites the same subject matter as claim 1 except for specifying that the first end of the bimetal spring has a curved apex. In view of the above, the applicants submit that claim 1 is patentable over Hashiba et al. in view of Ito et al.

Claims 3-8 depend directly from claim 1. In view of such dependence on claim 1, the applicants submit that claims 3-8 are also patentable over Hashiba et al. in view of Ito et al.

CONCLUSION

Thus, the applicants submit that none of the claims, presently in the application are obvious under the provisions of 35 U. S. C. § 103. Consequently, the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.


If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms. Patricia A. Verlangieri, at (609)

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734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,


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